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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/027,650	12/21/2001	Arthur Christopher Leyh	CS11235	1167

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MOTOROLA INC
600 NORTH US HIGHWAY 45
ROOM AS437
LIBERTYVILLE, IL 60048-5343

EXAMINER

EWART, JAMES D

ART UNIT	PAPER NUMBER
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2683

DATE MAILED: 06/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/027,650

Applicant(s)

LEYH ET AL.

Examiner

James D Ewart

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,6,10-14,16,17 and 20-27 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,3-7,10-17,20-27 is/are rejected.
- 7) ☒ Claim(s) 4,5,7 and 15 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Response to Arguments

1. Regarding the 35 U.S.C. 112, enablement rejection of claims 10-14, 17, 22 and 23, applicant admits that transmitting or receiving an uncompressed CDMA signal is known generally to those having ordinary skill in the art, therefore the rejection is withdrawn.
2. Regarding the 35 U.S.C. 112, enablement rejection of claims 1 and 15, applicant's arguments are considered valid therefore the rejection is withdrawn.
3. The applicant's arguments regarding prior art rejections filed April 13, 2004, have been fully considered by the Examiner and Examiner agrees with argument against claims 1 and 16, that since Byrne eliminates one antenna by connecting two transceivers to one antenna, it does not make sense to combine another reference that adds an additional antenna. Therefore, applicant is provided with a fourth non-final. As currently phrased in the claims, the communication device could be any wireless communication device, including a base station. Examiner suggests that Applicant indicate in the independent claims that the invention is a mobile communication device and replace continuous transmission mode with CDMA, if that is what Applicant is implying.
4. Regarding claim 20, applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.
5. Regarding applicant's argument that there is no motivation for combining a reference, which teaches a CDMA transceiver with the Byrne reference, examiner disagrees. Byrne teaches

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a radiotelephone operable for more than one radiotelephone system, including cordless. Although Poirier et al is related to power control, in order to combine references, Examiner is only required to show a teaching within a secondary reference and purpose to combine the secondary reference with the primary reference. Examiner will use the Poirier et al reference which shows a teaching of using CDMA transmission and the reason for combining is that it is an increasingly popular transmission scheme (Column 1, Lines 14 and 15) with a power control scheme that utilizes a single control signal and provides optimal output power control (Column 4, Lines 21-24). Although Examiner will only use the Poirier et al reference, Examiner has also cited the Beasley reference, which teaches using CDMA in a cordless phone.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1, 3 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Maile (U.S. Patent No. 4,761,822).

Referring to claim 1, Maile teaches a wireless communications device, comprising: a first transceiver having a first receiver and a first transmitter (Figure 2; 26); a first antenna coupled to the first receiver (Figure 2; 24); a second transceiver having a second receiver and a second transmitter (Figure 2; 26 and Column 2, Lines 46-54); a second antenna coupled to the first receiver (Figure 2; 22), the first and second transmitters connectable at the same time to the same one of the first antenna (Figure 2).

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Referring to claim 3, Maile further teaches the first and second transmitters disconnectable from the same one of the first and second antennas (Figure 1).

Referring to claim 6, Maile further teaches a switch coupling the first and second transmitters and the second receiver to the same one of the first and the second antennas (Fig. 1).

8. Claim 16 is rejected under 35 U.S.C. 102(b) as being anticipated by Auvray (U.S. Patent No. 5,564,076).

Referring to claim 16, a method in a wireless communications device having a first transceiver, the method comprising: receiving a first signal with a first receiver of the first transceiver (Figure 2), the first receiver coupled to a first antenna (Figure 2, 226); transmitting a second signal with a first transmitter of the first transceiver at the same time the first receiver is receiving the first signal, the first transmitter coupled to a second antenna different than the first antenna (Figure 2, 221 and Column 2, Lines and Column 1, Lines 59-67).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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9. Claims 10, 11 and 14 are rejected under 35 USC 103(a) as being unpatentable over Vaisanen et al (U.S. Patent No. 6,606,311) in view of Wang et al. (U.S. Patent No. 6,606,311)

Referring to claims 10 and 14, Vaisanen et al teaches a method in a wireless communications device having a first transceiver and a second transceiver (Figure 1), comprising: receiving a spread spectrum signal with a first receiver of the first transceiver (Column 4, Lines 50-60); receiving a second signal with a second receiver of the second transceiver at the same time the first receiver is receiving the spread spectrum signal (Column 4, Lines 50-60), but does not teach receiving an uncompressed CDMA signal. Wang et al teaches receiving an uncompressed CDMA signal (Column 2, Lines 1-4 and Column 3, Lines 7 - 13). Therefore, at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to combine the art of Byrne and Beasley et al. with the art of Wang et al. of receiving an uncompressed CDMA signal to identify and apply an appropriate QoS class of service to wireless IP data traffic flow (Column 3, Lines 6-8).

Referring to claim 11, Vaisanen et al further teaches receiving the second signal with the second receiver operating in a non-continuous reception mode at the same time the first receiver is receiving the spread spectrum signal (Column 4, Lines 50-60). A local area network uses packetized data which is non-continuous.

10. Claims 12 and 13 are rejected under 35 USC 103(a) as being unpatentable over Vaisanen et al and Wang et al. and further in view of Byrne (U.S. Patent No. 5,737,703).

Referring to claims 12 and 13, Vaisanen et al and Wang et al. teach the limitations of claim 12, but do not teach using a GSM receiver. Byrne teaches using a GSM receiver (Figure 4). Therefore, at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to combine the art of Vaisanen et al and Wang et al. with the teaching of Byrne of using a GSM receiver in an environment in which communication systems are individually or simultaneously available (Column 6, Lines 44-47).

11. Claim 17 is rejected under 35 USC 103(a) as being unpatentable over Auvray and further in view of Wang et al.

Referring to claim 17, Auvray teaches receiving the first signal with the first receiver includes receiving a CDMA downlink signal (Column 7, Lines 12-14), but does not teach receiving an uncompressed CDMA signal. Wang et al teaches receiving an uncompressed CDMA signal (Column 2, Lines 1-4 and Column 3, Lines 7 - 13). Therefore, at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to combine the art of Auvray with the art of Wang et al. of receiving an uncompressed CDMA signal to identify and apply an appropriate QoS class of service to wireless IP data traffic flow (Column 3, Lines 6-8).

12. Claims 20 and 21 are rejected under 35 USC 103(a) as being unpatentable over Byrne and further in view of Poirier et al (U.S. Patent No. 6,341,219).

Referring to claims 20 and 21, Byrne teaches a method in a wireless communications device having a first transceiver and a second transceiver (Column 1, Lines 32-34 and Column 4, Lines 9-10) comprising: transmitting a first signal with a first transmitter of the first transceiver operating in a continuous transmission mode (Column 7, Lines 6—67 and Column 8, Lines 20-64), the first transmitter coupled to a first antenna (Figure 2' 228); receiving a second signal with a second receiver of the second transceiver at the same time the first transmitter is transmitting the first signal (Column 4, Lines 9-10), the second receiver coupled to a second antenna different than the first antenna (Figure 2, 238), but does not teach using continuous spread spectrum. Poirier et al. teaches using spread spectrum (Column 2, Lines 10-12 and Column 4, Lines 28-30). Therefore at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to combine the art of Byrne with the teachings of Poirier et al of using spread spectrum to implement an increasingly popular transmission scheme (Column 1, Lines 14 and 15) with a power control scheme that utilizes a single control signal and provides optimal output power control (Column 4, Lines 21-24).

13. Claims 22 and 23 is rejected under 35 USC 103(a) as being unpatentable over Byrne and Poirier et al and further in view of Wang.

Referring to claims 22 and 23, Byrne teaches the second receiver is a TDMA receiver (Column 6, Lines 44-47), transmitting uplink signal with the first transmitter; receiving the second signal with the TDMA receiver at the same time the first transmitter is transmitting the uplink signal (Column 4, Lines 9-10), but does not teach the first transmitter is a CDMA transmitter and transmitting an uncompressed CDMA signal. Wang et al teaches the first

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transmitter is a CDMA transmitter and transmitting an uncompressed CDMA signal (Column 2, Lines 1-4 and Column 3, Lines 7 - 13). Therefore, at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to combine the art of Byrne with the art of Wang et al. the first transmitter is a CDMA transmitter and transmitting an uncompressed CDMA signal to identify and apply an appropriate QoS class of service to wireless IP data traffic flow (Column 3, Lines 6-8).

14. Claims 24 and 26 are rejected under 35 USC 103(a) as being unpatentable over Byrne in view of Poirier et al. (U.S. Patent No. 6,341,219).

Referring to claim 24, Byrne teaches a method in a wireless communications device having a first transceiver and a second transceiver (Column 1, Lines 32-34 and Figure 2), the method comprising: transmitting with a first transmitter of the first transceiver; transmitting with a second transmitter of the second transceiver at the same time that the first transmitter is transmitting (Column 4, Lines 9-10); but does not teach receiving at the same time as transmitting. Poirier et al. teaches receiving at the same time as transmitting (Column 2, Lines 10-12 and Column 4, Lines 28-30). Therefore at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to combine the art of Byrne with the teachings of Poirier et al of receiving at the same time as transmitting to implement an increasingly popular transmission scheme (Column 1, Lines 14 and 15) with a power control scheme that utilizes a single control signal and provides optimal output power control (Column 4, Lines 21-24).

Referring to claim 26, Byrne teaches a method in a wireless communications device having a first transceiver and a second transceiver (Column 1, Lines 32-34 and Figure 2), the method comprising: receiving with a first receiver of the first transceiver; receiving with a second receiver of the second transceiver at the same time that the first receiver is receiving (Column 4, Lines 9-10); but does not teach receiving at the same time as transmitting. Poirier et al. teaches receiving at the same time as transmitting (Column 2, Lines 10-12 and Column 4, Lines 28-30). Therefore at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to combine the art of Byrne with the teachings of Poirier et al of receiving at the same time as transmitting to implement an increasingly popular transmission scheme (Column 1, Lines 14 and 15) with a power control scheme that utilizes a single control signal and provides optimal output power control (Column 4, Lines 21-24).

15. Claims 25 and 27 are rejected under 35 USC 103(a) as being unpatentable over Byrne and Poirier et al and further in view of Shaffer.

Referring to claims 25 and 27, Byrne teaches the limitations of claims 25 and 27, but does not teach receiving an uncompressed signal. Shaffer et al. teaches receiving an uncompressed signal (Column 8, Lines 52-53). Therefore, at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to combine the art of Byrne with the art of Shaffer et al. of receiving an uncompressed signal to improve signal quality (Column 8, Line 52).

Allowable Subject Matter

16. Claims 4, 5, 7 and 15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Referring to claim 4, the references cited do not teach combined CDMA and TDMA transmitters connectable at the same time to either a first or second antenna.

Referring to claim 5, there is no motivation to combine another reference with Maile to include the limitation of an internal antenna and an external antenna wherein transmitters are connectable at the same time to either a first or second antenna.

Referring to claim 7, there is no motivation to combine another reference with Maile to include the limitation a display and input/ outputs coupled to the processor.

Referring to claim 15, the references cited do not teach connecting the first transmitter and the second transmitter to the same one of the first and second at the same time.

Conclusion

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Craig et al U.S. Patent No. 4,101,836 discloses sectorized antenna receiving system.

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Matusевич et al. U.S. Patent No. 6,535,733 discloses measurement radio system for producing operating information for traffic radios.

Meredith U.S. Patent No. 6,006,113 discloses radio signal scanning and targeting system for use in land mobile radio base sites.

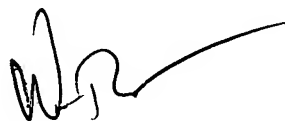
Okanoue et al U.S. Patent No. 6,738,439 discloses diversity reception method and diversity receiver.

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James D Ewart whose telephone number is (703) 305-4826. The examiner can normally be reached on M-F 7am - 4pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James D Ewart can be reached on (703)308-5318. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9306 for After Final communications.

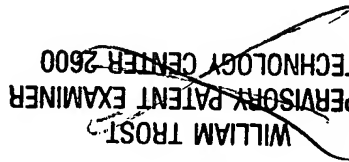
Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-3900.


Ewart

June 7, 2004



WILLIAM TROST
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600


WILLIAM TROST
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600